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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,466	10/01/2003	Tohru Okada	243379US3X	5536
22850	7590	06/30/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			NGUYEN, KIMBERLY D	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/674,466

Applicant(s)

OKADA ET AL.

Examiner

Kimberly D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/1/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the use of the legal phraseology “means”, on lines 2, 4 and 6, is not permitted. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4, 6-8, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Muranaga et al. (US 4,851,896; hereinafter “Muranaga”).

Re claims 1, 6-7 and 12: Muranaga teaches a housing (1 in figs. 2A-2B; col. 2, line 63); a reading portion (2 in fig. 1; col. 3, line 3) provided at the housing for reading a code (image) provided at an object (A; col. 2, lines 63-65); image capturing means (15 in figs. 2A-2B; col. 4, lines 10-12) provided at the housing for capturing an image of the code (col. 4, lines 7-14; col. 5, line 49 through col. 6, line 18); light generating means including a light source (11 in figs 2A-2B) provided at the housing for irradiating an illumination light to the code (col. 4, lines 6-7); light restriction means (guide 13 in figs. 2B-2B) for restricting an amount of reflected illumination light, reflected from the code, that enters the image capturing means (“...the light reflected from original B is guided by light guide 13 to lens 14 and then to image sensor 15...” col. 4, lines 7-12; col. 8, lines 20-22); and a flexible board (the inner surfaces such as surface 1a, 1b, front and rear surfaces of the housing 1 and/or frame 17, etc. are interpreted as a flexible

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board; col. 3, lines 1-10) provided at the housing, on which the light source (11 in fig. 2B) is positioned (light source 11 is positioned on the surface 1a in fig. 2B; see fig. 2B).

Re claims 2 and 8: Muranaga teaches the housing (1) includes an opening portion (the opening portion is between the two walls of guide 13; see fig. 2A) between the light restriction means (13) and the reading portion (2), and the flexible board (the inner surfaces of the housing 1) is positioned at an internal wall of the housing (1) that faces the opening portion (see fig. 2A).

Re claims 4 and 10: Muranaga teaches "Light source 11 includes an array of LEDs." (col. 4, lines 6-7), which is the light source includes plural light sources arranged in series as set forth in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 5, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muranaga in view of Miksch et al. (US 6,160,250; hereinafter "Miksch"). The teachings of Muranaga have been discussed above.

Muranaga teaches the code reader having the essential optical parts such as printed circuit board (20), light source (11), the supporting member (16) is fastened to inner frame (17), the inner wall of the housing such as surfaces 1a, 1b, and front and rear surfaces, etc., which are assembled together within the code reader housing (1) (see figs. 2A-2B; col. 3, lines 1-10; col. 4, lines 1-25).

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However, Muranaga fails to specifically teach or fairly suggest the code reader further comprising an adhesive provided at a side of the light source, the adhesive fixing the flexible board to the housing.

Miksch teaches optical reader (10) comprising an optical detector (42), an illumination/light source (46), etc., all attached to a mounting surface/board (40) using a method of glue, clipping, heat staking, or any of a number of conventional attachment methods known in the art (col. 4, lines 22-25; col. 4, lines 52-60; col. 4, lines 62-64).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate using adhesive/glue for assembling parts together within the code reader device as taught by Miksch to the teachings of Muranaga in order to conveniently compose the essential optical parts of the code reader through the well known adhesive/glue means to further secure the parts within the code reader.

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kitakado et al. (US 5,408,538) teaches a printed pattern provided with a wiring pattern having a land and a through hole surrounded by the land, wherein the wiring pattern and the through hole are read by a photoelectric image sensor to obtain a pattern image and a hole image, respectively. Roustaei (US 5,291,009) teaches a bar code scanner comprising light

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emitting diode (LED), CCD capable of reading the barcode symbols at the variable distance.

MacDonald et al. (US 4,145,714) teaches a television flaw detector and process for inspection of the wall surface of a hole through a circuit board. Genest et al. (US 4,097,728) teaches a card reader is a box-like structure consisting essentially of three parts: the bottom section, the frame member, and a printed circuit board, wherein all parts are secured together by adhesive, screws, or the like, to form the reader housing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly D. Nguyen whose telephone number is 571-272-2402. The examiner can normally be reached on Monday-Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KDN

June 27, 2005